

WHAT IS CLAIMED IS:

1. A semiconductor device comprising:

a first buried wiring;

a second buried wiring formed as a layer different from said first buried wiring;

a contact hole, which is formed between said first buried wiring and said second buried wiring and is filled with a wiring material for electrically connecting said first buried wiring and said second buried wiring therethrough; and

a dummy hole, which has a hole diameter different from said contact hole, is so formed in vicinity of said contact hole as to connect said first buried wiring, and is filled with a wiring material therein.

2. The semiconductor device according to Claim 1, wherein said second buried wiring is formed as an upper layer of said first buried wiring, and said dummy hole is formed over said first buried wiring and has a diameter larger than said contact hole.

3. The semiconductor device according to Claim 1, wherein said second buried wiring is formed as an upper layer of said first buried wiring, and said dummy hole is formed below said first buried wiring and has a diameter smaller than said contact hole.

4. The semiconductor device according to Claim 1, wherein said second buried wiring is formed as a lower layer of said first buried wiring, and said dummy hole is formed below said first buried wiring and has a diameter smaller than said contact hole.

5. The semiconductor device according to Claim 1, wherein said second buried wiring is formed as an upper layer of said first buried wiring, and said dummy hole is formed over said first buried wiring and has a diameter smaller than said contact hole.

6. The semiconductor device according to Claim 1, wherein said wiring material is made of copper.

7. The semiconductor device according to Claim 3, wherein a diameter of said dummy hole is so set as to cause a plugging failure when said dummy hole is filled with said wiring material.

8. The semiconductor device according to Claim 4, wherein a diameter of said dummy hole is so set as to cause a plugging failure when said dummy hole is filled with said wiring material.

9. The semiconductor device according to Claim 5, wherein a diameter of said dummy hole is so set as to cause a plugging failure when said dummy hole is filled with said wiring material.

10. A method for manufacturing a semiconductor device including a first buried wiring, a second buried wiring formed as an upper layer of said first buried wiring, a contact hole, which is formed between said first buried wiring and said second buried wiring and is filled with a wiring material for permitting electric connection between said first buried wiring and said second buried wiring therewith, and a dummy hole, which is so formed over said first buried wiring in the vicinity of said contact hole and has a hole diameter larger than said contact hole and in which a wiring material is filled, the method comprising the steps of:

forming said first buried wiring;

forming an insulating film on said first buried wiring through a diffusion-preventive film and etching the insulating film to simultaneously form said contact hole and said dummy hole in said insulating film so that a surface of said first buried wiring is exposed to at a bottom of said dummy hole; and

filling said contact hole and said dummy hole with a wiring material, respectively.

11. A method for manufacturing a semiconductor device including a first buried wiring, a second buried wiring formed as an upper layer of said first buried

wiring, a contact hole, which is formed between said first buried wiring and said second buried wiring and is filled with a wiring material for permitting electric connection between said first buried wiring and said second buried wiring therewith, and a dummy hole, which is formed below said first buried wiring in the vicinity of said contact hole and has a hole diameter smaller than said contact hole and in which a wiring material is filled, the method comprising the steps of:

forming a wiring groove for forming said first buried wiring and forming said dummy hole below the wiring groove in such a size as to cause a plugging failure when a wiring material is filled in the dummy hole;

burying said dummy hole and said wiring groove with a wiring material; and

forming the contact hole over said first buried wiring that has been formed by the burying of the wiring material and filling said contact hole with a wiring material.

12. A method for manufacturing a semiconductor device including a first buried wiring, a second buried wiring formed as a lower layer of said first buried wiring, a contact hole, which is formed between said

first buried wiring and said second buried wiring and is filled with a wiring material for electrically connecting said first buried wiring and said second buried wiring therewith, and a dummy hole, which is formed below said first buried wiring in the vicinity of said contact hole and has a hole diameter smaller than said contact hole and into which a wiring material is filled, the method comprising the steps of:

forming said second buried wiring;

forming said contact hole and said dummy hole over said second buried wiring in such a size as to cause a plugging failure when a wiring material is filled in said dummy hole;

forming a groove for wiring for forming said first buried wiring in such a condition as to be electrically connected with said contact hole and said dummy hole; and

filling a wiring material into the contact hole, the dummy hole, and the groove for wiring, respectively.

13. A method for manufacturing a semiconductor device including a first buried wiring, a second buried wiring formed as an upper layer of said first buried wiring, a contact hole, which is formed between said first buried wiring and said second buried wiring and is filled with a wiring material for electrically connecting

said first buried wiring and said second buried wiring therewith, and a dummy hole, which is formed over said first buried wiring in the vicinity of said contact hole and has a hole diameter smaller than said contact hole and in which a wiring material is filled, the method comprising the steps of:

forming said first buried wiring;

forming said contact hole and a dummy pattern over said first buried wiring in such a size as to cause a plugging failure when a wiring material is filled in said dummy hole;

forming a groove for wiring over said first buried wiring for forming said second buried wiring in such a condition as to be electrically connected with said contact hole and said dummy pattern; and

filling a wiring material in said contact hole, said dummy hole, and said groove for wiring, respectively.